

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently Amended) An emergency information terminal mounted in a vehicle having a main battery, for executing an emergency call notifying process a center supervising a emergency information system, said emergency information terminal comprising:

a first power supply circuit coupled to said main battery for supplying power; and

a second power supply circuit coupled to said main battery for supplying power;

wherein said first power supply circuit and said second power supply circuit are coupled to said main battery in parallel.

2. (Original) The emergency information terminal of claim 1, further comprising a controller operable to detect abnormality of said first and second power supply circuits.

3. (Original) The emergency information terminal of claim 2, wherein said controller is operable to detect at least one of drop of an output voltage of each of said first and second power supply circuits and drop of an output voltage of said main battery.

4. (Currently Amended) The emergency information terminal of claim 2, wherein said controller is operable to detect the abnormality when the drop of the output voltage of each of said first and second power supply circuits is less than or equal to a predetermined voltage.

5. (Original) The emergency information terminal of claim 2, wherein said controller is operable to detect the abnormality of said first and second power supply circuits by comparing the output voltage of said main battery and the output voltage of each of said first and second power supply circuits.

6. (Original) The emergency information terminal of claim 5, wherein said controller is operable to detect the abnormality of said first and second power supply circuits when the output voltage of each said first and second power supply circuits drops less than or equal to a predetermined voltage while the output voltage of said main battery is over a predetermined voltage.

7. (Original) The emergency information terminal of claim 2, wherein said controller is operable to inform a user of the abnormality when detecting the abnormality.

8. (Original) The emergency information terminal of claim 2, wherein said controller is operable to record the abnormality as abnormality history data when detecting the abnormality.

9. (Original) The emergency information terminal of claim 8, wherein said controller is operable to issue the abnormality history data to outside.

10. (Original) The emergency information terminal of claim 1,

wherein said first power supply circuit usually supplies power, and

wherein said controller is operable to have said second power supply circuit supply power when detecting at least one of drop of an output voltage of said first power supply circuit and drop of an output voltage of said main battery.

11. (Original) The emergency information terminal of claim 10, wherein said controller is operable to cut off said first power supply circuit when detecting at least one of the drop of the output voltage of said first power supply circuit and the drop of the output voltage of said main battery.

12. (Original) The emergency information terminal of claim 11, wherein said controller is operable to cut off said second power supply circuit, and to have said first power supply circuit supply power when detecting that said first power supply circuit is restored normally while said second power supply circuit supplies power.

13. (Original) The emergency information terminal of claim 12, wherein said controller is operable to detect that said first power supply circuit is restored normally when the output voltage of said first power supply circuit rises over a predetermined voltage.

14. (Original) The emergency information terminal of claim 10, wherein said controller is operable to have said first power supply circuit continue to supply power when detecting at least one of the drop of the output voltage of said first power supply circuit and the drop of the output voltage of said main battery.

15. (Original) The emergency information terminal of claim 14, wherein said controller is operable to cut off said second power supply circuit when detecting that said first power supply is restored normally while said second power supply circuit supplies power.

16. (Original) The emergency information terminal of claim 15, wherein said controller is operable to detect that said first power supply circuit is restored normally when the output voltage of said first power supply circuit rises over a predetermined voltage.

17. (Original) The emergency information terminal of claim 10, wherein said controller is operable to have said second power supply circuit supply power when detecting one of the drop of the output voltage of said first power supply circuit less than or equal to a first predetermined voltage and the drop of the output voltage of said main battery less than or equal to a second predetermined voltage.

18. (Original) The emergency information terminal of claim 1,

wherein said first and second power supply circuits usually supply power, and

wherein said second power supply circuit supplies power when an output of said first power supply circuit is interrupted.

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)
22. (Original) The emergency information terminal of claim 1, further comprising:

a sub controller operable to control communications with an external device, and

a main controller operable to control other than the communications with said external device.
23. (Original) The emergency information terminal of claim 22,

wherein said first power supply circuit supplies power to said main controller, and

wherein said second power supply circuit supplies power to said sub controller.
24. (Original) The emergency information terminal of claim 22, wherein said first and second power supply circuits supply power to said main controller and said sub controller.
25. (Original) The emergency information terminal of claim 22,

wherein said first power supply circuit supplies power to said main controller and said sub controller, and

wherein said second power supply circuit supplies power to said main controller.
26. (Original) The emergency information terminal of claim 22,

wherein said first power supply circuit supplies power to said main controller and said sub controller, and

wherein said second power supply circuit supplies power to said sub controller.
27. (Original) The emergency information terminal of claim 22, wherein said main controller is operable to monitor an operation of said first and second power supply circuits.

28. (Original) The emergency information terminal of claim 27, wherein said main controller is operable to detect abnormality when an output voltage of each of said first and second power supply circuits drops less than or equal to a predetermined voltage.

29. (Original) The emergency information terminal of claim 28, wherein said main controller is operable to inform a user of the abnormality when detecting the abnormality.

30. (Previously Presented) The emergency information terminal of claim 28, further comprising a memory unit capable of storing abnormality history data, wherein said main controller is operable to record the abnormality into said memory unit as the abnormality history data when detecting the abnormality.

31. (Original) The emergency information terminal of claim 30, wherein said main controller is operable to issue the abnormality history data to outside.

32. (Previously Presented) The emergency information terminal of claim 22, wherein at least one of said main controller and said sub controller is operable to monitor an operation of said first and second power supply circuits.

33. (Original) The emergency information terminal of claim 22, wherein said main controller and sub controller are operable to monitor an operation of said first and second power supply circuits.

34. (Original) The emergency information terminal of claim 22,

wherein said first power supply circuit supplies power to said sub controller, and

wherein said main controller is operable to monitor an operation of said first power supply circuit.

35. (Original) The emergency information terminal of claim 22,

wherein said first power supply circuit supplies power to said main controller, and

wherein said sub controller is operable to monitor an operation of said first power supply circuit.

36. (Original) The emergency information terminal of claim 22,

wherein said first power supply circuit supplies power to said main controller, and

wherein said main controller is operable to monitor an operation of said first power supply circuit, and to output a result of monitoring the operation to said sub controller.

37. (Original) The emergency information terminal of claim 22,

wherein said first power supply circuit supplies power to said sub controller, and

wherein said sub controller is operable to monitor an operation of said first power supply circuit, and to output a result of monitoring the operation to said main controller.

38. (Cancelled)

39. (Cancelled)

40. (Currently Amended) An emergency information terminal mounted in a vehicle having a main battery, said emergency information terminal being capable of connecting an external device, for executing an emergency call notifying process to a center supervising an emergency information system, said emergency information terminal comprising:

first and second power supply circuits for supplying power, said first power supply circuit and said second power supply circuit are coupled to said main battery in parallel;

a sub controller operable to control communications with said external device; and

a main controller operable to control other than the communications with said external device,

wherein said first power supply circuit ~~usually~~ supplies power to said main controller and sub controller, and

wherein said second power supply circuit supplies power to said main controller and sub controller when said main controller detects abnormality of said first power supply circuit.

41. (Original) The emergency information terminal of claim 40, further comprising an auxiliary battery,

wherein said main battery usually supplies power to said first and second power supply circuits,

wherein said main controller and sub controller are operable to monitor each other,

wherein said main controller is operable to monitor an output voltage of said main battery, and

wherein said auxiliary battery supplies power to said first and second power supply circuits when said main controller detects abnormality in the output voltage of said main battery.

42. (Original) The emergency information terminal of claim 41, wherein said main controller is operable to inform a user that said auxiliary battery supplies power to said first and second power supply circuits by controlling an indicator to light or flicker.

43. (Original) The emergency information terminal of claim 41,

wherein said main controller and sub controller are operable to communicate each other, and

wherein said sub controller is operable to detect abnormality in said main controller when failing to communicate with said main controller, and to inform a user of the abnormality by controlling an indicator to light or flicker.

44. (Original) The emergency information terminal of claim 41,

wherein said main controller and sub controller are operable to communicate each other,
and

wherein said main controller is operable to detect abnormality in said sub controller
when failing to communicate with said sub controller, and to inform a user of the abnormality
by controlling an indicator to light or flicker.

45. (Currently Amended) An emergency information system comprising:

an emergency information terminal mounted in a vehicle having a main battery, said
emergency information terminal including:

a first power supply circuit coupled to said main battery for supplying power; ~~and~~

a second power supply circuit coupled to said main battery for supplying power;
and

an emergency information center for receiving an emergency call signal from said
emergency information terminal;

wherein said first power supply circuit and said second power supply circuit are coupled
to said main battery in parallel.

46. (Currently Amended) An emergency information terminal mounted in a vehicle
having a main battery, for executing an emergency call notifying process to a center
supervising a emergency information system, said emergency information terminal comprising:

a first power supply circuit coupled to said main battery for supplying power;

an auxiliary battery; and

a second power supply circuit coupled to said auxiliary battery for supplying power, said second power supply circuit being separate from said first power supply circuit.

47. (Original) The emergency information terminal of claim 46,

wherein said first power supply circuit usually supplies power, and

wherein said second power supply circuit supplies power if power supply from said main battery is interrupted.

48. (Currently Amended) An emergency information system comprising:

an emergency information terminal mounted in a vehicle having a main battery, including

a first power supply circuit coupled to said main battery for supplying power;

an auxiliary battery; and

a second power supply circuit coupled to said auxiliary battery for supplying power, said second power supply circuit being separate from said first power supply circuit; and

an emergency information center for receiving an emergency call signal from said emergency information terminal.

49. (Currently Amended) An emergency information terminal mounted in a vehicle, having a main battery mounted therein, said emergency information terminal being capable of connecting to an external device, for placing an emergency call to a center supervising a emergency information system, said emergency information terminal comprising:

a first power control device is operable to supply power to said external device and to cut off the power, said first power control device receiving power from said main battery;

a hands-free device capable of coupling a microphone for hands-free voice talk; and

a second power control device operable to supply power to said microphone, said second power control device receiving power from said main battery, said first power control device and said second power control device being coupled to said main battery in parallel.

50. (Original) The emergency information terminal of claim 49, wherein said first power control device is operable to cut off the power when outputting a current exceeding a predetermined current.

51. (Original) The emergency information terminal of claim 49, wherein said first power control device is operable to cut off supply of power when the output voltage drops less than or equal to a predetermined voltage.

52. (Currently Amended) The emergency information terminal of claim 49, ~~further comprising:~~

~~a hands-free device capable of coupling a microphone for hands-free voice talk; and~~

~~a second power control device operable to supply power to said microphone;~~

wherein said second power control device is operable to cut off the power in one of cases that at least one of output voltages of said first and second power control devices drops less than or equal to a predetermined voltage, and that at least one of output currents of said first and second power control devices flows more than a predetermined current.

53. (Currently Amended) ~~The~~An emergency information terminal ~~of claim 49, further comprising~~ mounted in a vehicle having a main battery mounted therein, said emergency information terminal being capable of connecting to an external device, for placing an emergency call to a center supervising a emergency information system, said emergency information terminal comprising:

a first power control device operable to supply power to said external device and to cut off the power, said first power control device receiving power from said main battery.

a second power control device operable to couple with a lighting device in an emergency call send button and of supplying power to said lighting device, wherein said second power control device is operable to cut off the power in one of cases that at least one of output voltages of said first and second power control devices drops less than or equal to a predetermined voltage, and that at least one of output currents of said first and second power control devices flows more than a predetermined current, said second power control device receiving power from said main battery, said first power control device and said second power control device being coupled to said main battery in parallel.

54. (Currently Amended) ~~The~~An emergency information terminal ~~of claim 49, further comprising~~mounted in a vehicle having a main battery mounted therein, said emergency information terminal being capable of connecting to an external device, for placing an emergency call to a center supervising a emergency information system, said emergency information terminal comprising:

a first power control device operable to supply power to said external device and to cut off the power, said first power control device receiving power from said main battery; and

a second power control device operable to couple with a mobile handset telephone and of feeding power to said mobile handset telephone, wherein said second power control device is operable to cut off the power in one of cases that at least one of output voltages of said first and second power control devices drops less than or equal to a predetermined voltage, and that at least one of output currents of said first and second power control devices flows more than a predetermined current, said second power control device receiving power from said main battery, said first power control device and said second power control device being coupled to said main battery in parallel.

55. (Original) The emergency information terminal of claim 49,

wherein said first power control device includes:

a power supply path; and

a resistance connected in series to said power supply path,

wherein said first power control device is operable to cut the power when a voltage at both ends of said resistance becomes more than a predetermined voltage.

56. (Currently Amended) An emergency information system comprising:

an emergency information terminal mounted in a vehicle having a main battery mounted therein, said emergency information terminal capable of being connected to an external device, for placing an emergency call, said emergency information terminal including

a first power control device operable to supply power to said external device and to cut off the power, said first power control device receiving power from said main battery,

a hands-free device capable of coupling a microphone for hands-free voice talk, and

a second power control device operable to supply power to said microphone, said second power control device receiving power from said main battery, said first power control device and said second power control device being coupled to said main battery in parallel; and

an emergency information center for receiving the emergency call sent from said emergency information terminal.

57. (Cancelled)

58. (Cancelled)

59. (Cancelled)

60. (Cancelled)

61. (Cancelled)

62. (Cancelled)

63. (Cancelled)

64. (Cancelled)

65. (Cancelled)

66. (Cancelled)

67. (Cancelled)

68. (Cancelled)

69. (Cancelled)

70. (Cancelled)

71. (Cancelled)

72. (New) An emergency information system comprising:

an emergency information terminal mounted in a vehicle having a main battery mounted therein, said emergency information terminal capable of being connected to an external device, for placing an emergency call, said emergency information terminal including

a first power control device operable to supply power to said external device and to cut off the power, said first power control device receiving power from said main battery, and

a second power control device operable to couple with a lighting device in an emergency call send button and of supplying power to said lighting device, wherein said second power control device is operable to cut off the power in one of cases that at least one of output voltages of said first and second power control devices drops less than or equal to a predetermined voltage, and that at least one of output currents of said first and second power control devices flows more than a predetermined current, said second power control device receiving power from said main battery, said first power control device and said second power control device being coupled to said main battery in parallel; and

an emergency information center for receiving the emergency call sent from said emergency information terminal.

73. (New) An emergency information system comprising:

an emergency information terminal mounted in a vehicle having a main battery mounted therein, said emergency information terminal capable of being connected to an external device, for placing an emergency call, said emergency information terminal including

a first power control device operable to supply power to said external device and to cut off the power, said first power control device receiving power from said main battery, and

a second power control device operable to couple with a mobile handset telephone and of feeding power to said mobile handset telephone, wherein said second power control device is operable to cut off the power in one of cases that at least one of output voltages of said first and second power control devices drops less than or equal to a predetermined voltage, and that at least one of output currents of said first and second power control devices flows more than a predetermined current, said second power control device receiving power from said main battery, said first power control device and said second power control device being coupled to said main battery in parallel; and

an emergency information center for receiving the emergency call sent from said emergency information terminal.